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BOGENBERGER, V		
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BRILSFORD, M D		
BURNS, T. F.		
DECK, C. A.	X	X
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FERRERA, D.W.		
FERRI, M.S.		
GERMAIN, A. L.		
GIACOMINI, J.		
HALL, L.		
SOM, J. H.		
MARTINEZ, L.A.	X	X
WCLAUGHLIN, J.		
WORTH, K.		
PARKER, A.M.	X	X
POWERS, K.		
RAAZ, R. D.		
RODGERS, A. D.		
SCOTT, G.K.	X	X
SHELTON, D.C.	X	X
SPEARS, M.S.		
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TUOR, N.R.		
VOORHEIS, G.M.		
WILLIAMS, J. L.		

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Date By

Ref Ltr #

DOE ORDER #

NONE

Mr Steve Gunderson
Rocky Flats Cleanup Agreement Project Coordinator
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Mr Timothy Rehder
Rocky Flats Team Lead
U S Environmental Protection Agency
999 18th Street, Suite 500
Denver, Colorado 80202-2466

Dear Mr Gunderson and Mr Rehder.

Enclosed for your review is the Rocky Flats Cleanup Agreement (RFCA) Annual Review for Fiscal Year 2001. Included in the report are proposed updated pages for the Implementation Guidance Document (RFCA Appendix 3) Please provide your comments on this document as soon as possible. If you have any questions or comments, please contact me at (303) 966-5918 or Glenn Doyle at (303) 966-3087.

Sincerely,

Joseph A. Legare
Assistant Manager
for Environment and Stewardship

Enclosures (5)

cc w/Encs:
J. Legare, AMES, RFFO
G Doyle, RC, RFFO
R. DiSalvo, CR, RFFO
S. Bell, OCC, RFFO
D. Shelton, K-H
L Brooks, K-H
Administrative Record

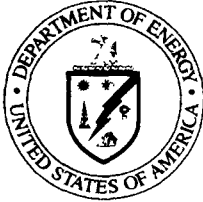


ADMIN RECORD

SW-A-004489

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
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CEX-010-98

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Department of Energy

ROCKY FLATS FIELD OFFICE
10808 HIGHWAY 93, UNIT A
GOLDEN COLORADO 80403-8200

MAR 19 2002

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Sincerely,

A handwritten signature in black ink, which appears to read "Joseph A. Legare".

Joseph A. Legare
Assistant Manager
for Environment and Stewardship

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Administrative Record

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2001 ROCKY FLATS CLEANUP AGREEMENT ANNUAL REVIEW JANUARY 2002

1.0 BACKGROUND

The Rocky Flats Cleanup Agreement (RFCA or Agreement) was signed by the Department of Energy (DOE), the Environmental Protection Agency (EPA) and the Colorado Department of Public Health and Environment (CDPHE) on July 19, 1996 (DOE, EPA, and CDPHE are collectively referred to as the "RFCA Parties ") The RFCA Parties have committed to review the Agreement to determine if any revisions are necessary RFCA paragraph 5 states

The Parties shall conduct an annual review of all applicable new and revised statutes and regulations and written policy and guidance to determine if an amendment pursuant to Part 19 (Amendment of Agreement) is necessary

In addition to the annual review prescribed in RFCA paragraph 5, the agencies committed to conducting an internal annual review of the radionuclide soil action levels (RSALs) Questions to be addressed on an annual basis include

- 1 Is there new scientific information available that would impact the interim action levels?
- 2 Has a national soil action level been promulgated within the year? If yes, the parties commit to revisit the Rocky Flats interim action levels
- 3 How were the interim action levels applied to the site over the course of the year?
- 4 Have the remedies been effective?

(See, Responsiveness Summary for Soil Action Levels released on November 6, 1996)

This report is a summary of the Parties' 2001 regulatory/radionuclide soil action levels annual review

1.1 What the Parties reviewed this year

The 2001 Regulatory/Radionuclide Soil Action Level Annual Review covers the period from July 1, 2000 through June 30, 2001 The following environmental laws and associated regulations, written policy, and guidance were reviewed

Comprehensive Environmental Response, Compensation, and Liability Act,
Resource Conservation and Recovery Act/Colorado Hazardous Waste Act,
Toxic Substances Control Act,
Clean Water Act,
Clean Air Act,
National Environmental Policy Act,
Endangered Species Act,
Radiation Related Document Review, and
Defense Authorization Acts and Appropriation Acts

In addition to the above environmental laws and the radionuclide soil action levels, the Action Levels and Standards Framework for Surface Water, Ground Water, and Soils (ALF), the Preliminary Programmatic Remediation Goals (PPRGs), and the Implementation Guidance Document (IGD) were reviewed. Summaries of these reviews are described below.

1.2 What the Parties did not review as part of the annual review

Pursuant to RFCA paragraph 281, DOE developed, in consultation with CDPHE and EPA, a revised Community Relations Plan entitled "Rocky Flats Site-wide Integrated Public Involvement Plan" (Plan). The Plan was completed in March 1998, and is available in the Rocky Flats Public Reading Rooms. RFCA requires an annual review of this document; the RFCA Parties have not made any revisions to the Plan since it was completed in March 1998.

The Integrated Monitoring Plan (IMP) is being reviewed for FY01-02. An IMP Working Group was formed including members from DOE and its contractors, EPA, CDPHE, and stakeholders. The final FY01-02 IMP is scheduled to be completed in early 2002.

DOE reviews and updates, as required, the Environmental Restoration Ranking (RFCA paragraph 79), the Administrative Record (RFCA paragraph 284), the summary level baseline (RFCA paragraph 141), and the Historical Release Report (RFCA paragraph 119(1)) on an annual basis. These reviews were completed in September 2001.

The Integrated Water Management Plan (IWMP) is also reviewed annually; the Rocky Flats Water Working Group will conduct the next review of the IWMP.

For more information on any of the above documents, contact either a RFCA Project Coordinator or an Agency community relations representative.

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2.0 ENVIRONMENTAL STATUTES

As stated above, all major environmental laws, regulations, written policy, and guidance were reviewed. If there was a change to an environmental law, regulation, written policy or guidance, the Kaiser-Hill Company, L L C (Kaiser-Hill) reviewed whether the change had been implemented at the site and whether the change impacted RFCA. This review was completed by Kaiser-Hill and reviewed by the RFCA Parties.

2.1 Comprehensive Environmental Response, Compensation, and Liability Act

While the action has been pending for several years, the reauthorization of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) did not occur in 2001. EPA has not amended or promulgated new regulations on the National Oil and Hazardous Substances Pollution Contingency Plan, however, EPA has issued several new policies and guidance documents that may be used at Superfund sites. Attachment 1 is a partial list of EPA's new policy and guidance documents that were issued since July 1, 2000 that may be relevant to RFETS.

2.2 Resource Conservation and Recovery Act/Colorado Hazardous Waste Act

Within the review period, three final rules established regulations pursuant to the Resource Conservation and Recovery Act (RCRA) that may potentially impact RFETS activities. Because the three rules are less stringent than current federal RCRA requirements, the State of Colorado must adopt the regulations prior to the regulations being implemented at RFETS. Kaiser-Hill is monitoring the State of Colorado regulatory activities. Upon adoption of these rules by the State of Colorado, the rules may be implemented at RFETS.

The Storage, Treatment, Transportation, and Disposal of Mixed Waste final rule (66 FR 27218) was promulgated on May 16, 2001 and became effective on November 13, 2001. The rule conditionally exempts low level mixed waste and technologically enhanced naturally occurring and/or accelerator produced radioactive material (NARM) containing hazardous waste from RCRA storage, treatment, manifest, transportation, and disposal requirements provided specified conditions are met. The RCRA storage and treatment conditional exemption contained in the rule is not applicable to DOE sites, however, RFETS would be eligible for the transportation and disposal conditional exemption. The exemption would exempt low level mixed waste from the definition of hazardous waste, allowing the low level mixed waste to be manifested, transported, and disposed as

radioactive waste to an NRC or NRC agreement state licensed low level radioactive waste disposal facility

The second significant regulatory change to RCRA within the review period has been the finalization of the Hazardous Waste Identification Rule (HWIR) revisions to the mixture and derived from rules (66 FR 27266). The rule was finalized on May 16, 2001 and became effective on August 14, 2001. The potential significant impact to RFETS is that certain previously listed hazardous wastes would no longer be subject to RCRA regulation. The impacts would be to a small number of waste streams. The rule narrows the scope of the mixture and derived from rules through the expansion of the exclusions for mixtures and/or derived from wastes listed solely for the characteristics of ignitability, corrosivity, and/or reactivity, and, provides for exclusion of mixed waste from the hazardous waste regulation when managed under specified conditions. Under the expanded applicability of the exclusion from the mixture and/or derived from rules, wastes that are listed solely for a characteristic of ignitability, corrosivity, or reactivity that do not meet the characteristics for ignitability, corrosivity, or reactivity at the point of generation are not subject to the hazardous waste regulations. Wastes listed solely for the characteristics mentioned above that have been de-characterized through treatment and meet LDR would also be excluded from regulation as a RCRA hazardous waste.

On December 6, 2000, EPA finalized a temporary deferral on the requirement that polychlorinated biphenyls (PCBs) be considered a constituent subject to treatment when PCBs are present in soils that exhibit the Toxicity Characteristic (TC) for metals. TC metal only waste streams at RFETS would not have to meet treatment standards for PCBs prior to disposal. The rule became effective on the date of finalization.

2.3 Toxic Substances Control Act

On April 2, 2001, EPA amended the requirements for reclassifying transformers, electromagnets, switches, and voltage regulators that contain polychlorinated biphenyls (PCBs) from PCB status (500 parts per million (ppm)) to PCB-Contaminated (50 but <500 ppm) or non-PCB (<50 ppm) status, or from PCB-Contaminated to non-PCB status (66 FR 17601). The rule is not likely to impact RFETS operations.

2.4 Clean Water Act and Safe Drinking Water Act

While the action has been pending for several years, the renewal of the Clean Water Act (CWA) did not occur in 2001. EPA continued to promulgate regulations under the existing Act. On December 7, 2000, EPA published the final

rule for National Primary Drinking Water Regulations for radionuclides, including a Maximum Contaminant Limitation (MCL) for uranium. In past regulatory action, the Colorado Water Quality Control Commission suspended action on basic standards for radionuclides until this action. Publication of the final rule by EPA allows the State to move forward with previously proposed rulemaking. In State matters, DOE and Kaiser-Hill jointly participated in the November 2000 triennial review of water quality standards in the South Platte River Basin before the WQCC. Among the actions taken by the Commission were the continuation of temporary modifications in Segments 4a, 4b, and 5 of Big Dry Creek, first adopted in 1997, through the year 2009, and to change the Use Classification of Segment 4a from Recreation 2 to Recreation 1a. The Recreation 2 use classification was retained for Segments 4b and 5.

On October 27, 2000, the RFETS National Pollutant Discharge Elimination System (NPDES) permit was renewed. The renewed permit is issued jointly to DOE, Kaiser-Hill and Rocky Flats Closure Site Services. The co-permittees appealed certain portions of the permit proposed to Building 374. The appeal has been settled and the appealed portions of the permit went into effect on May 1, 2001.

2.5 Clean Air Act

EPA and the State of Colorado continued to promulgate regulations under the existing Act, but the majority is not applicable to RFETS activities. Where new regulations were applicable there were no new compliance requirements. Kaiser-Hill and DOE will continue to monitor regulatory activity associated with this effort.

In January 2001, DOE signed a Smoke Management Memorandum of Understanding (MOU) amongst various federal agencies operating within the State of Colorado. The MOU establishes responsibilities for Land Managers and outlines the actions to be performed for permitting and conducting prescribed burns. No additional requirements are contained within the MOU that warrant updating RFCA or the ARARs.

The Governor for the State of Colorado signed Senate Bill 2001-214 on June 5, 2001. The law requires the air quality control commission review land management plans adopted by any significant user of prescribed fire. CDPHE will be developing applicable regulations that will address (1) the specific content that land management plans should contain, (2) applicable fee schedules, and, (3) applicable definitions, such as significant user. Thresholds for determining applicability appear to be acreage under the control of the federal landowner as well as the extent of prescribed fire usage. RFETS is tracking the development of

the implementing regulations. The proposed implementing regulations do not impact RFETS.

On June 27, 2001, EPA published a final rule (66 FR 34114) making a determination of attainment for the carbon monoxide National Ambient Air Quality Standard (NAAQS) for metropolitan Denver. The NAAQS are part of the existing ARARs, therefore, the change in determination for carbon monoxide should not warrant revision to RFCA.

2.6 National Environmental Policy Act

No separate National Environmental Policy Act reviews have been required or performed under RFCA pursuant to RFCA paragraph 95.

2.7 Endangered Species Act

During the review period, a final rule for special regulations (the "4(d) Rule") for the Preble's meadow jumping mouse was finalized. While this May 22, 2001 rule does not apply to actions by Federal agencies, some provisions similar to those in the rule may be applied to DOE actions at RFETS during consultation on the species. The current rule does not directly impact current or future RFETS operations.

2.8 Radiation Related Document Review

See Section 6.0, Radionuclide Soil Action Levels, below.

2.9 Summary

Based on the review of the environmental statutes and associated regulations, written policy, and guidance, no amendment to RFCA is required at this time. However, final agreement by the RFCA Parties on the potential radionuclide and staging pile applicable or relevant and appropriate requirements was reached during 2001, these requirements have been incorporated into the RFETS Master List of Potential Applicable or Relevant and Appropriate Requirements (IGD Appendix K).

3.0 PRELIMINARY PROGRAMMATIC REMEDIATION GOALS

DOE developed risk-based PPRGs in 1995 to establish initial site-wide cleanup targets for contaminants for each environmental medium. The PPRGs are currently used in RFCA Attachment 5, as action levels for the following mediums:



Groundwater Action Levels PPRGs based on the residential groundwater ingestion scenario are used where no Maximum Contaminant Level (MCL) is available from USEPA,

Surface Soil Action Levels For non-radionuclides, PPRGs are used as action levels for the appropriate land use, e g , industrial use or open space use, and

Subsurface Soil Action Levels For non-radionuclide inorganics, PPRGs are used as action levels for the appropriate land use, e g , industrial use or open space use

Based on the pending federal legislation (passed in December 2001) designating RFETS as a National Wildlife Refuge, the RFCA Parties decided to not complete the PPRG annual review for 2001 The RFCA Parties will update the PPRGs to include a wildlife refuge worker scenario in 2002

4.0 RFCA ATTACHMENT 5: ACTION LEVELS AND STANDARDS FRAMEWORK FOR SURFACE WATER, GROUND WATER AND SOILS

The RFCA Parties have identified changes to standards and action levels that impact RFCA Attachment 5 Prior to any changes to action levels or standards in RFCA Attachment 5, the public will have an opportunity to comment on the proposed changes as required in RFCA paragraph 117

5.0 IGD

The IGD was reviewed by the RFCA Parties to determine if an update was necessary The IGD was updated Proposed update pages are included in this report as Attachments 2 and 3 Stakeholders interested in obtaining a copy of the final IGD update pages should contact either a RFCA Project Coordinator or an Agency community relations representative

6.0 RADIONUCLIDE SOIL ACTION LEVELS

The RFCA Parties are continuing the 2000/2001 RSAL annual review at this time A final report is anticipated during 2002 Prior to any changed RSALs being incorporated into RFCA Attachment 5, the public will have an opportunity to comment on the proposed changes as required in RFCA paragraph 117 RSAL Working Group meetings are open to the public and working group updates are provided at the RFCA Stakeholder Focus Group For more information on the RSAL review process or the RFCA Stakeholder Focus Group, contact either a RFCA Project Coordinator or an Agency community relations representative

In addition to the annual review requirements prescribed in RFCA paragraph 5, the RFCA Parties will also address the four questions discussed in the introduction. The RSAL working group is reviewing questions 1 and 2 as part of the 2000/2001 RSAL Annual Review. Regarding question 3, no interim RSALs have been applied to the site over the course of the review period. Monitoring of past remedies, e.g., Mound Site Plume and T-1, continues, the effectiveness of past remedial actions is still being determined by the groundwater monitoring program.

NEW CERCLA GUIDANCE AND POLICIES

Draft Child-Specific Exposure Factors Handbook ; June 2000

The National Center for Environmental Assessment has published a draft Exposure Factors Handbook in 1997 (EPA/600/P-95/002Fa-c), which includes exposure factors and related data on both adults and children, however, the EPA Program Offices identified the need to consolidate all child exposure data into one document. The goal of the Child-Specific Exposure Factors Handbook is to fulfill that need.

(URL <http://www.epa.gov/ncea/csefh2.htm>)

A Guide to Developing and Documenting Cost Estimates During the Feasibility Study; OSWER Directive 9355.0-75; July 2000

This guidance document addresses cost estimates of remedial alternatives developed during the remedial investigation/feasibility study process. The goals of this guidance are to improve consistency, completeness, and accuracy of cost estimates developed to support the Superfund remedy selection process.

(URL <http://www.epa.gov/superfund/resources/remedy/>)

Draft Ecological Soil Screening Level Guidance; July 10, 2000

This guidance provides a set of risk-based soil screening levels (Eco-SSLs) for many of the soil contaminants that are frequently of ecological concern for terrestrial plants and animals at hazardous waste sites. It also describes the process used to derive these levels and provides guidance for their use.

(URL <http://www.epa.gov/superfund/programs/risk/ecorisk/ecossl.htm>)

Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups; OSWER 9355.0-74FS-P; September 2000

This fact sheet provides Superfund and RCRA Corrective Action site managers and decision-makers with an overview of the types of Institutional Controls (ICs) that are commonly used or implemented, and outlines the factors that should generally be considered when evaluating and selecting ICs as part of the remedy.

Soil Screening Guidance for Radionuclides: User's Guide; OSWER Directive 9355 4-16A; October 2000

The Soil Screening Guidance for Radionuclides is a tool developed by EPA to help standardize and accelerate the evaluation and cleanup of radioactively contaminated soils at sites on the National Priorities List where future residential land use is anticipated
(URL <http://www.epa.gov/superfund/resources/radiation/radssg.htm>)

Reuse Assessments: A Tool to Implement the Superfund Land Use Directive; OSWER 9355.7-06P; June 4, 2001

This directive presents information for developing future land use assumptions when making remedy selection decisions for Superfund sites under CERCLA
The purpose of this directive is to

Reaffirm the directive "Land Use in the CERCLA Remedy Selection Process," OSWER Directive No. 9355 7-04, May 1994 in Superfund response actions, and highlight its importance in achieving the goals of the Superfund Redevelopment Initiative,

Extend the applicability of the Superfund Land Use Directive to non-time critical removal actions, where appropriate, and

Introduce the "Reuse assessment" as a tool to help implement the Superfund Land Use Directive

(URL <http://www.epa.gov/superfund/resources/reusefinal.pdf>)

Integrated Risk Information System (IRIS) 2001 Update

IRIS is a database containing scientific analyses of adverse human health effects that may result from chronic exposure to environmental contaminants

RFCA Documents Index

- 1 Quality Assurance Criteria Document, Rev 1, Kaiser-Hill Company L L C , effective February 2, 1996 (Or most current version)
- 2 U S Department of Energy, Historical Release Report for the Rocky Flats Plant, Volumes I and II, June 1992
- 3 Existing ER Standard Operating Procedures
- 4 U S Department of Energy, Rocky Flats Site-wide Integrated Public Involvement Plan, U S Department of Energy, March 1998
- 5 Treatability Study Work plans listed in the Administrative Record
- 6 Health and Safety Practices Manual, EG&G Rocky Flats, Inc , (Adopted by Kaiser-Hill Company, L L C in July 1995) September 30, 1995 (Or most current version)
- 7 U S Department of Energy, Plan for Prevention of Contaminant Dispersion, February 1992
- 8 U S Department of Energy, Background Geochemical Characterization Report, Rocky Flats Plant, September 30, 1993
- 9 Final Treatability Studies Plan, Volumes I and II, August 1991
- 10 Final resolutions of previous disputes that are relevant to implementation of RFCA The Administrative Record shall be reviewed for such resolutions, and this list will be updated accordingly
- 11 U S Department of Energy, Rocky Flats Environmental Technology Site, Integrated Monitoring Plan FY98/FY99, October 1998
- 12 U S Department of Energy, Decommissioning Program Plan, Rocky Flats Environmental Technology Site, Golden, Colorado, October 8, 1998 Approved by CDPHE on November 4, 1998 Approved by EPA on November 12, 1998
- 13 U S Department of Energy, Modification to the Decommissioning Program Plan, December 1998 Approved by CDPHE and EPA on December 22, 1998
- 14 U S Department of Energy, Modification to the Decommissioning Program Plan, June 1999 CDPHE and EPA approved the modification on June 21, 1999
- 15 U S Department of Energy, Industrial Area Sampling and Analysis Plan, Rocky Flats Environmental Technology Site, Golden, Colorado, June 2001 Approved by CDPHE on June 18, 2001

- 16 U S Department of Energy, Sampling and Analysis Plan for the Decontamination & Decommissioning Monitoring of Buildings 991, 559, and 881 Approved by CDPHE on June 21, 2001

PAMs

- 1 U S Department of Energy, Proposed Action Memorandum Hotspot Removal Rocky Flats Plant Operable Unit 1, Rocky Flats Plant, Golden, Colorado, September 1994
- 2 U S Department of Energy, Final Proposed Action Memorandum Remediation of Polychlorinated Biphenyls, Rocky Flats Environmental Technology Site, Golden, Colorado, May 1995
- 3 U S Department of Energy, Modified Proposed Action Memorandum Passive Seep Collection and Treatment Operable Unit 7, Rocky Flats Environmental Technology Site, Golden, Colorado, July 1995
- 4 U S Department of Energy, Modified Proposed Action Memorandum Passive Seep Collection and Treatment Operable Unit 7, minor modification, July 1998
- 5 U S Department of Energy, Final Proposed Action Memorandum for the Remediation of Individual Hazardous Substance Site 109, Ryan's Pit, Rocky Flats Environmental Technology Site, Golden, Colorado, August 24, 1995
- 6 U S Department of Energy, Final Proposed Action Memorandum for the Remediation and Draft Modification of Colorado Hazardous Waste Corrective Action Section of the Operating Permit for Rocky Flats Environmental Technology Site, Golden, Colorado, October 1995
- 7 U S Department of Energy, Draft Proposed Action Memorandum Remediation for the Contaminant Stabilization of Underground Storage Tanks, Rocky Flats Environmental Technology Site, Golden, Colorado, February 14, 1996.
- 8 U S Department of Energy, Proposed Action Memorandum for the Source Removal at Trenches T-3 and T-4, IHSSs 110 and 111 1, Rocky Flats Environmental Technology Site, Golden, Colorado, August 24, 1995
- 9 U S Department of Energy, Final Proposed Action Memorandum for the Source Removal at the Mound Site, IHSS 113, Revision 0, Rocky Flats Environmental Technology Site, Golden, Colorado, February 3, 1997 Approved by EPA in February 1997
- 10 U S Department of Energy, Final Proposed Action Memorandum for the Source Removal at Trench 1, IHSS 108, Rocky Flats Environmental Technology Site, Golden, Colorado, July 1997 Approved by EPA on August 27, 1997

- 11 U S Department of Energy, Final Proposed Action Memorandum for the Source Removal at Trench 1, IHSS 108, modification, February 1998 EPA approved the modification in March 1998
- 12 U S Department of Energy, Building 123, Proposed Action Memorandum, Rocky Flats Environmental Technology Site, Golden, Colorado, August 1997 Approved by CDPHE on August 25, 1997
- 13 U S Department of Energy, Building 123 Proposed Action Memorandum, minor modification, May 21, 1998
- 14 U S Department of Energy, Proposed Action Memorandum (PAM) for Decommissioning Building Cluster 980 (B980), Revision 0, Rocky Flats Environmental Technology Site, Golden, Colorado, August 15, 1997 Approved by CDPHE on August 25, 1997
- 15 U S Department of Energy, Final Proposed Action Memorandum for the East Trenches Plume, Rocky Flats Environmental Technology Site, Golden, Colorado, February 4, 1999 Approved by EPA in February 1999
- 16 U S Department of Energy, Final Proposed Action Memorandum for the East Trenches Plume, field modification Approved by EPA and CDPHE on June 2, 1999

IM/IRAs and Decommissioning Operation Plans

- 1 U S Department of Energy, Final Interim Measures/Interim Remedial Action Decision Document for Rocky Flats Industrial Area, Rocky Flats Environmental Technology Site, Golden, Colorado, November 1994
- 2 U S Department of Energy, Operable Unit 4 Solar Evaporation Ponds Interim Measures/Interim Remedial Action Environmental Assessment Decision Document, Rocky Flats Environmental Technology Site, Golden, Colorado, April 9, 1992
- 3 U S Department of Energy, Interim Measures/Interim Remedial Action Plan and Decision Document, 881 Hillside Area, Operable Unit No 1, Rocky Flats Plant, Golden, Colorado, January 1990
- 4 U S Department of Energy, Final Surface Water Interim Measures/Interim Remedial Action Plan/Environmental Assessment and Decision Document South Walnut Creek Basin, Rocky Flats Plant, Golden, Colorado, October 1994

NOTE The last two IM/IRA references (January 1990 IM/IRA for the 881 Hillside and the October 1994 IM/IRA for the South Walnut Creek Basin) were administratively combined in 1995

- 5 U S Department of Energy, Modification to the Final Surface Water Interim Remedial Action Plan Environmental Assessment and Decision Document South Walnut Creek Basin dated October 1994 Approved by EPA on July 11, 1997
- 6 U S Department of Energy, Modification to the Interim Measures/Interim Remedial Action Plan and Decision Document, 881 Hillside Area Operable Unit No 1, dated January 1990 Conditionally approved by EPA on August 27, 1997
- 7 U S Department of Energy, Final Mound Site Plume Decision Document, Major Modification to the Final Surface Water Interim Measure/Interim Remedial Action Plan/Environmental Assessment and Decision Document for South Walnut Creek March 1991, Revised October 1994, Rocky Flats Environmental Technology Site, Golden, Colorado, September 30, 1997 Approved by EPA in September 1997
- 8 U S Department of Energy, Termination of the Surface Water Interim Remedial Action Plan Environmental Assessment and Decision Document South Walnut Creek Basin dated October 1994, July 28, 1998
- 9 U S Department of Energy, Interim Measure/Interim Remedial Action Decision Document, National Conversion Pilot Project, Stage II, Rocky Flats Field Office, Golden, Colorado, March 30, 1995

NOTE Although this IM/IRA is regulated under RFCA, the IM/IRA provides that the activities conducted under the IM/IRA shall not become regulatory milestones Further, the National Conversion Pilot Project work is funded in accordance with a Cooperative Assistance Agreement, and not through normal RFETS budget planning The work being done under this IM/IRA ceased upon expiration of the funds provided under the Cooperative Assistance Agreement for Stage II The IM/IRA work was not included in the Integrated Site-wide Baseline

- 10 U S Department of Energy, Corrective Action Management Unit Interim Measure/Interim Remedial Action Decision Document and Application Support Document for Containerized Storage at the Rocky Flats Environmental Technology Site, Golden, Colorado, Final, August 1997 Approved by CDPHE on August 28, 1997
- 11 U S Department of Energy, Corrective Action Management Unit Interim Measure/Interim Remedial Action Decision Document and Application Support Document for Bulk Storage at the Rocky Flats Environmental Technology Site, Golden, Colorado, Final, August 1997 Approved by CDPHE on August 28, 1997
- 12 U S Department of Energy, Decommissioning Operations Plan for the 779 Cluster Interim Measure/Interim Remedial Action, Rocky Flats Environmental Technology Site, Golden, Colorado, February 1998 Approved by CDPHE on February 6, 1998

- 13 U S Department of Energy, Decommissioning Operations Plan, for the 779 Cluster Interim Measure/Interim Remedial Action, modification, June 2, 1998
- 14 U S Department of Energy, Decommissioning Operations Plan for the Building 779 Cluster, modification, October 12, 1998 The Modification included the demolition plan for Building 729 The Modification was approved by CDPHE on November 13, 1998
- 15 U S Department of Energy, Decommissioning Operations Plan for the Building 779 Cluster, modification, February 16, 1999 Approved by CDPHE on February 19, 1999
- 16 U S Department of Energy, Decommissioning Operations Plan for the Building 779 Cluster, minor modification, May, 1999. Approved by CDPHE on May 20, 1999
- 17 U S. Department of Energy, Decommissioning Operations Plan for the Building 779 Cluster modification to include the 779 Cluster Demolition Plan Approved by CDPHE on July 27, 1999
- 18 U S Department of Energy, Building 886 Cluster Closure Project Interim Measure/Interim Remedial Action, Rocky Flats Environmental Technology Site, Golden, Colorado, July 30, 1998 Approved by CDPHE on August 3, 1998
- 19 U S Department of Energy, Building 771/774 Closure Project Decommissioning Operations Plan, Rocky Flats Environmental Technology Site, Golden, Colorado, December 1998 Approved by CDPHE on January 11, 1999
- 20 U S Department of Energy, Building 776/777 Closure Project Decommissioning Operations Plan, Rocky Flats Environmental Technology Site, Golden, Colorado, November 3, 1999 Approved by CDPHE on November 5, 1999
- 21 U S Department of Energy, the Decommissioning Operations Plan for 776/777, minor modification, December 9, 1999 Approved by CDPHE on December 15, 1999
- 22 U S Department of Energy, Interim Measure/Interim Remedial Action for the Solar Ponds Plume Remediation Project, Rocky Flats Environmental Site, Golden, Colorado, June 11, 1999 Approved by CDPHE on June 11, 1999
- 23 U S Department of Energy, Interim Measure/Interim Remedial Action for the Solar Ponds Plume Remediation Project, Field modification Approved by CDPHE and EPA on August 31, 1999
- 24 U S Department of Energy, Interim Measure/Interim Remedial Action for the Solar Ponds Plume Remediation Project field modification Approved by CDPHE and EPA on August 31, 1999

- 25 U S Department of Energy, Decommissioning Operations Plan for B776/777, minor modification #2, February 17, 2000 Approved by CDPHE on February 24, 2000
- 26 U S Department of Energy, Decommissioning Operations Plan for B776/777, minor modification #3, March 3, 2000 Approved by CDPHE on March 3, 2000
- 27 U S Department of Energy, Decommissioning Operations Plan for B779, minor modification, March 10, 2000 Approved by CDPHE on March 20, 2000
- 28 U S Department of Energy, Decommissioning Operations Plan for B776/777, minor modification #4, May 17, 2000 Approved by CDPHE on May 23, 2000
- 29 U S Department of Energy, Decommissioning Operations Plan for B771/774, field modification, June 7, 2000 Approved by CDPHE on June 27, 2000
- 30 U S Department of Energy, Decommissioning Operations Plan for B771/774, field modification, June 14, 2000 Approved by CDPHE on June 27, 2000
- 31 U S Department of Energy, B776/777 DOP, modification #5, September 11, 2000 Approved by CDPHE on September 13, 2000
- 32 U S Department of Energy, B707 Closure Project DOP, Rocky Flats Environmental Technology Site, Golden, Colorado, December 21, 2000 Approved by CDPHE on January 18, 2001
- 33 U S Department of Energy, B776/777 DOP, modification #6, January 22, 2001 Approved by CDPHE on February 22, 2001
- 34 U S Department of Energy, B771 Closure Project DOP, modification, February 28, 2001 Approved by CDPHE on March 2, 2001
- 35 U S Department of Energy, B371/374 Closure Project DOP, Rocky Flats Environmental Technology Site, Golden, Colorado, March 26, 2001 Approved by CDPHE on March 29, 2001
- 36 U S Department of Energy, B776/777 Closure Project DOP, modification #7, June 7, 2001 Approved by CDPHE on June 27, 2001
- 37 U S Department of Energy, B771 Closure Project DOP, modification and Proposed Action Memorandum for Under Building Contamination Remediation, June 11, 2001 Approved by CDPHE on September 6, 2001

RSOPs

- 1 U S Department of Energy, RFCA Standard Operating Protocol (RSOP) for the Disposition of Concrete Rubble, Rocky Flats Environmental Technology Site, Golden, Colorado, October 18, 1999 Approved by CDPHE and EPA on October 18, 1999
- 2 U S Department of Energy, RFCA Standard Operating Protocol for Facility Disposition, Rocky Flats Environmental Technology Site, August 14, 2000 Approved by EPA and CDPHE on October 5, 2000
- 3 U S Department of Energy, RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities, Rocky Flats Environmental Technology Site, Golden, Colorado, February 4, 2001 Approved by EPA and CDPHE on February 22, 2001
- 4 U S Department of Energy, RSOP for Soil and Asphalt Management, Rocky Flats Environmental Technology Site, Golden, Colorado, August 3, 2001 Approved by EPA and CDPHE on August 28, 2001

CAD/RODs

- 1 U S Department of Energy, Corrective Action Decision/Record of Decision, Operable Unit 11 West Spray Field, Rocky Flats Environmental Technology Site, Golden, Colorado, September 1995 Approved October 1995
- 2 U S Department of Energy, Corrective Action Decision/Record of Decision, Operable Unit 15 Inside Building Closures, Rocky Flats Environmental Technology Site, Golden, Colorado, September 1995 Approved October 1995
- 3 U S Department of Energy, Corrective Action Decision/Record of Decision, Operable Unit 16 Low Priorities Sites, Rocky Flats Environmental Technology Site, Golden, Colorado, August 1994 Approved October 1994
- 4 U S Department of Energy, Corrective Action Decision/Record of Decision, Operable Unit 1, Rocky Flats Environmental Technology Site, Golden, Colorado, March 1997 Approved March 1997
- 5 U S Department of Energy, Corrective Action Decision/Record of Decision, Operable Unit 3, Rocky Flats Environmental Technology Site, Golden, Colorado, April 1997 Approved June 1997

Requirement	Citation	Type	Comment
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ATOMIC ENERGY ACT (AEA) [42 USC 2200 et seq.]			
CHRONIC BERYLLIUM DISEASE PREVENTION PROGRAM	10 CFR 850	A	Establishes a program to reduce the number of worker currently exposed to beryllium in the course of their work at DOE facilities. The cited sections are followed in relation to determinations of beryllium contamination and release to the public
• Definitions	3		
• Release criteria	31		
• Waste disposal	32		
• Warning labels	38 (b-c)		

RADIATION CONTROL			
Emergency Plan - required if material quantity exceeds Schedule E of Part 3 (e.g., 2 curies of alpha emitters) and evaluation shows maximum dose to offsite person from release exceeds 1 rem (5 rem to thyroid)	RH 3 9 11	A/L	DOE maintains its Emergency Plan in accordance with DOE Order 151 1, "Comprehensive Emergency Management System"
Decommissioning Plan Contents - must include a description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning	RH 3 16 4 3 3	A	Planned implementation of Site approved procedures to meet 10 CFR 835, "Occupational Radiation Protection" and the Site's IWCP process will be described for proposed actions
Decommissioning Plan Contents - must include a description of the planned final radiation survey	RH 3 16 4 3 4	A/L	Planned implementation of the Decommissioning Characterization Protocols or any final sampling and analysis plan for environmental media will be described
Decommissioning Plan Contents - must include a description of the intended final condition of the site, buildings and/or outdoor areas upon decommissioning	RH 3 16 4 3 6	A/L	

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

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Requirement	Citation	Type	Comment
RADIATION CONTROL			
Decommissioning Plan Contents - if proposing to use the criteria in RH 4 61 3 or RH 4 61 4 (restricted access), the plan must include analysis demonstrating that reductions in residual radioactivity necessary to comply with the provisions of RH 4 61 2 (unrestricted access) would result in net public or environmental harm or were not being made because residual levels of contamination associated with restricted conditions are ALARA, taking into account consideration of any detriments expected to potentially result from decontamination and waste disposal	RH 3 16 4 3 7 1	A/L	The analysis will be part of any accelerated action or final action regulatory decision document for environmental media cleanup projects proposing restricted access
Decommissioning Plan Contents - if proposing to use the criteria in RH 4 61 3 or RH 4 61 4 (restricted access), the plan must include a description of the institutional controls necessary to satisfy RH 4 61 3 2 (described below), including a description of how the controls will be enforced	RH 3 16 4 3 7 2	A/L	The description will be required for any final action regulatory decision document for environmental media cleanup projects proposing restricted access
Decommissioning Plan Contents - if proposing to use the criteria in RH 4 61 3 or RH 4 61 4 (restricted access), the plan must include an analysis demonstrating that if institutional controls were no longer in effect, the dose criteria of RH 4 61 3 3 (described below) will be met	RH 3 16 4 3 7 3	A/L	

Requirement	Citation	Type	Comment
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RADIATION CONTROL			
Decommissioning Plan will be approved by CDPHE if information therein meets RH 3 16, and RH 4 61, decommissioning is completed as soon as practicable, and health and safety of the public is adequately protected	RH 3 16 4 6	A/L	This section also specifies requirements for a long term care warranty under RH 3 9 5 10 that may be required if using the criteria in RH 4 61 3 or RH 4 61 4 (restricted access) The RFCA Parties agree that further analysis is required to determine whether long term care warranty requirements are relevant and appropriate to Rocky Flats Planned implementation of Site approved procedures to meet DOE Order 5400 5, "Radiation Protection of the Public and the Environment" and the Site's IWCP process, which includes Lead Regulatory Agency involvement, will be described for proposed actions The Closure Project Baseline is focused on achieving decommissioning as soon as practicable
Site radiation survey to establish residual contamination levels and/or confirm absence of contamination As appropriate, survey building/outdoor areas that contain residual radioactivity	RH 3 16 6 2	A/L	Requirements for radiation surveys are met through the Reconnaissance Level Characterization Survey Plans and Predemolition Survey Plans for facility decommissioning and through Sampling and Analysis Plans and the Integrated Monitoring Plan for Environmental Restoration

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Requirement	Citation	Type	Comment
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RADIATION CONTROL			
Submittal of final survey report, units and other information - specifies, as appropriate, that gamma levels be reported at 1 meter from surface in <i>microrem/hr</i> , removable and fixed contamination in DPM/100 cm ² , and radioactive concentrations in pCi/L or per gram, identify instruments used and certify proper calibration/testing	RH 3 16 6 3	A/L	Same as RH 3 16 6 2 above
Criteria for license termination based on CDPHE determination that (1) radioactive materials have been properly disposed, (2) licensee has demonstrated that regulatory requirements for termination have been met, (3) the licensee has established a long-term care warranty, if required, and (4) institutional controls have been implemented to limit public doses, if required	RH 3 16 7	A/L	Although license termination is not relevant to Rocky Flats, CDPHE believes the substantive criteria in this regulation are relevant and appropriate to determining the end point for decommissioning at Rocky Flats Subsection (1) is met through compliance with the "offsite rule", 40 CFR 300 440, and subsections (2) and (4) are addressed in RH 4 61 2 through 4 (discussed below) Subsection (3), which is grounded in RH 3 9 5 10, is discussed above under RH 3 16 4 6
Additional cleanup can be required if, based on new or previously unknown information, CDPHE finds that criteria in RH 4 61 not met and residual radioactivity remaining at site could result in significant threat to public health and safety	RH 3 16 8	L	This standard is generally consistent with the "imminent and substantial endangerment" standard under CERCLA Present risk of future harm (e g, a risk of cancer due to long-term exposure) can be an "imminent" threat

Requirement	Citation	Type	Comment
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RADIATION CONTROL			
Radiation Protection Program - To extent practicable, procedures and controls used shall be based on sound radiation protection principles to achieve public doses that are ALARA	RH 4 5 2	A	Planned implementation of Site approved procedures to meet 10 CFR 835, "Occupational Radiation Protection", DOE Order 5400 5, "Radiation Protection of the Public and the Environment" and the Site's IWCP process, which includes Lead Regulatory Agency involvement, will be described for proposed actions
Radiation Protection Program - Imposes constraint on air emissions of radioactive material to the environment "Individual member of the public likely to receive the highest dose" will not be expected to receive a TEDE greater than 10 mrem/yr from air emissions Requires exceedance reporting and corrective action to ensure against recurrence	RH 4 5 4	A	Listed only for completeness of this table. NESHAPS already identified as ARAR. Radionuclide NESHAPS required monitoring established at site perimeter is used to determine potential for exposure to individual member of the public
Dose limits for individual members of the public - TEDE from licensed operations less than 100 mrem/yr above background, exclusive of medical exposure and exposure from disposal by sanitary sewer Dose rate in unrestricted areas less than 2 mrem/hr	RH 4 14 1	A/L	Site approved procedures to meet DOE Order 5400 5, "Radiation Protection of the Public and the Environment" are based on the same dose rate limits

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Requirement	Citation	Type	Comment
<p>RADIATION CONTROL</p> <p>Dose Limits for Individual Members of Public – Surveys of radiation levels in unrestricted areas and radioactive materials in effluents released to unrestricted areas shall be made to demonstrate compliance with the dose limits for individual members of the public in RH 4 14</p>	RH 4 15 1	A/L	<p>Surveys are conducted pursuant to site approved procedures to meet DOE Order 5400 5, "Radiation Protection of the Public and the Environment" Radionuclide NESHAPS required monitoring established at site perimeter is used to determine potential for exposure to individual member of the public Surface water is monitored in accordance with the Integrated Monitoring Plan and RFCA Attachment 5</p>
<p>Dose Limits for Individual Members of Public – Provides the means to demonstrate compliance with RH 4 14 by measurement or calculation that dose does not exceed the annual limit or by demonstrating that annual average radioactive material concentration released in gaseous and liquid effluents at boundary of the unrestricted area does not exceed Appendix B, Table II, "Effluent Concentrations"</p>	RH 4 15 2 1 and 2	L	<p>Site approved procedures to meet DOE Order 5400 5, "Radiation Protection of the Public and the Environment" are based on the same dose rate limits</p> <p>Radionuclide NESHAPS required monitoring established at site perimeter is used to determine potential for exposure to individual member of the public Surface water is monitored in accordance with the Integrated Monitoring Plan and RFCA Attachment 5</p>

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Requirement	Citation	Type	Comment
<p>RADIATION CONTROL</p> <p>Surveys shall be made as necessary to evaluate radiation levels, concentrations of radioactive material and potential radiological hazards that could be present</p>	RH 4 17 1	A/L	<p>Planned implementation of Site approved procedures to meet 10 CFR 835, "Occupational Radiation Protection", DOE Order 5400 5, "Radiation Protection of the Public and the Environment" and the Site's IWCP process, which includes Lead Regulatory Agency involvement, will be described for proposed actions Requirements for radiation surveys are met through the Reconnaissance Level Characterization Survey Plans and Predemolition Survey Plans for facility decommissioning and through Sampling and Analysis Plans and the Integrated Monitoring Plan for Environmental Restoration</p>
<p>Instruments and equipment used for qualitative radiation measurements must be calibrated at intervals NTE 12 months, unless otherwise noted by regulation</p>	RH 4 17 2	A	

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Requirement	Citation	Type	Comment
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RADIATION CONTROL			
Waste Disposal - Shall dispose only by transfer to authorized recipient, by release in effluents within the limits of subpart RH 4 14 (discussed above), or as authorized pursuant to (pertinent to RFETS) RH 4 34, "Method for Obtaining Approval of Proposed Disposal Procedures", or RH 4 35, "Disposal by Release into Sanitary Sewerage"	RH 4 33	A/L	Transfer to authorized recipient is met through compliance with the "offsite rule", 40 CFR 300 440 Proposals for onsite disposal of radioactive waste (if any) will be part of any accelerated action, or any final action regulatory decision document for environmental media cleanup projects proposing specific disposal methods RH Part 11, "Special Land Ownership Requirements" which addresses requirements if government ownership of RFETS is transferred to private ownership, and RH Part 14, "Licensing Requirements for Land Disposal of Low Level Radioactive Waste" will be reviewed for relevant and appropriate requirements for cleanup projects proposing specific disposal methods.

Requirement	Citation	Type	Comment
Disposal by Release to Sanitary Sewer – Material must be “readily soluble” in water, monthly average concentrations below Appendix B, Table III, “Concentrations for Release to sanitary Sewerage” Total less than 1 curie/year	RH 4 35	A	Site approved procedures to meet DOE Order 5400 5, “Radiation Protection of the Public and the Environment” are based on the same concentration limits Required radionuclide monitoring for the discharge of the RFETS Sewage treatment Plant is established in the Rocky Flats NPDES Permit Surface water is also monitored in accordance with the Integrated Monitoring Plan and RFCA Attachment 5
RADIATION CONTROL Permissible levels of plutonium in uncontrolled areas – Soil concentration greater than 2 DPM per gram or per cm ² presents sufficient hazard to the public health that requires use of special construction techniques	RH 4 60	A/L	All of RFETS is a controlled area as defined in 10 CFR 20 1003 (“controlled area”, outside of a restricted area but inside the site boundary, access to which can be limited by the licensee for any reason) and RH 1 4 (“uncontrolled area” means area, access to which is neither limited nor controlled by the licensee) These terms are also consistent with 10 CFR 835 2 DOE does not anticipate any construction in uncontrolled areas to decommission RFETS

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Requirement	Citation	Type	Comment
<p>Radological Criteria for License Termination (i.e., for Decommissioning) - Must calculate maximum TEDE to "average member of the critical group" within the first 1000 years after decommissioning</p> <p>NOTE Decommissioning criteria in section RH 4 61 do not apply to waste disposal cells</p>	RH 4 61 1 2	A/L	<p>Although license termination is not relevant to Rocky Flats, CDPHE believes the substantive criteria in this regulation are relevant and appropriate standards for decommissioning Rocky Flats. See the RSAL Regulatory Analysis for the RFCA Parties understandings regarding implementation of the "Decommissioning Rule".</p>
<p>Radological Criteria (for Decommissioning) - Determination of dose and residual activity levels which are ALARA, must take into account consideration of any detriments expected to potentially result from decontamination and waste disposal</p>	RH 4 61 1 3	A/L	<p>The analysis will be part of any accelerated action for environmental media cleanup projects and any final action regulatory decision document</p>

RADIATION CONTROL			
<p>Criteria for Unrestricted Use - Residual radioactivity above background has been reduced to levels that are ALARA and results in TEDE to average member of the critical group that does not exceed 25 mrem/yr, including groundwater sources of drinking water</p>	RH 4 61 2	A/L	<p>The analysis will be part of any accelerated action for environmental media cleanup projects and any final action regulatory decision document</p>

Requirement	Citation	Type	Comment
Criteria for Restricted Use - Must demonstrate that further residual radioactivity reductions to meet Unrestricted Use	RH 4 61 3 1	A/L	
1) would result in net public or environmental harm OR 2) are not being made because residual levels are ALARA			
Criteria for Restricted Use -	RH 4 61 3 2 and 3	A/L	
1) Provisions made for durable, legally enforceable institutional controls that provide reasonable assurance that TEDE to average member of the critical group will not exceed 25 mrem/yr AND 2) If Institutional Controls were no longer in effect, TEDE above background is ALARA and would not exceed either 100 mrem/yr OR 500 mrem/yr, if demonstrated that further reductions are not technically achievable, would be prohibitively expensive or would result in net public or environmental harm			

RADIATION CONTROL			
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Requirement		Citation	Type	Comment
Alternate (Decommissioning) Criteria -		RH 4 61 4 1 1 through 3	A/L	
1) Analysis provides assurance that public health and safety would continue to be protected and unlikely TEDE would be more than 100 mrem/yr 2) Employment of restrictions on site use that minimize exposures at the site 3) Doses are reduced to ALARA				

CLEAN AIR ACT (CAA){tc \1 "CLEAN AIR ACT (CAA)} [42 USC 7401 et seq.]			
NATIONAL AMBIENT AIR QUALITY STANDARDS{tc \12 "AMBIENT AIR QUALITY STANDARDS} • Sulfur Dioxide • Particulate Matter (PM10 & PM2.5) • Carbon Monoxide • Ozone • Nitrogen Dioxide • Lead	5 CCR 1001-14 [40 CFR 50]	C	National Ambient Air Quality Standards (NAAQS) define levels of air quality which are deemed necessary, with an adequate margin of safety, to protect the public health. The standards are the basis for air quality regulations that are designed to improve and protect air quality. The Denver metro area exceeds the standard for particulate matter and carbon monoxide (i.e. non-attainment for those pollutants). Ambient air quality standards are not effluent discharge limitations, they are used in conjunction with air dispersion modeling to establish emission limits that are protective of air quality. Air Quality Management personnel will review projects for Prevention of Significant Deterioration and Non-attainment Area permitting requirements, and perform modeling, if

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Requirement	Citation	Type	Comment
CLEAN AIR ACT (CAA){tc \1 "CLEAN AIR ACT (CAA)} [42 USC 7401 et seq]			
			requested by CDPHE, to demonstrate compliance with the NAAQS
COLORADO AIR QUALITY CONTROL COMMISSION (CAQCC) REGULATIONS{tc \2 "COLORADO AIR POLLUTION REGULATIONS}	5 CCR 1001 [40 CFR 52, Subpart G]		
• Emission Control Regulations for Particulates, Smokes, Carbon Monoxide, and Sulfur Oxides	CAQCC Reg No 1 [5 CCR 1001-3]		
- Smoke and Opacity	Section II A 1	C	Air pollutant emissions from stationary sources shall not exceed 20% opacity (emissions from fuel-fired pumps, generators, and compressors, process vents/stacks, etc)
- Fugitive Particulate Emissions	Section III D		
- Construction Activities	III D 2(b)	A	Every activity shall employ control measures and operating procedures that are technologically feasible and economically reasonable which reduce, prevent, and control fugitive particulate emissions (control plans, use of control equipment, watering, etc)
- Storage and Handling of Material	III D 2(c)		
- Haul Roads	III D 2(e)		
- Haul Trucks	III D 2(f)		
- Demolition Activities	III D 2(h)		
- Sandblasting Operations	III D 2(j)		
• Odor Emissions	CAQCC Reg No 2 [5 CCR 1001-4]	C	Regulation No 2 prohibits odorous air contaminants from any single source to be emitted in detectable odors which are measured in excess of the air standards
• Air Pollutant Emission Notices (APEN), Construction Permits and Fees, Operating Permits, and Including the Prevention of Significant Deterioration	CAQCC Reg No 3 [5 CCR 1001-5]		
- APEN Requirements	Part A, Section II	C	An APEN shall be filed with the CDPHE prior to construction, modification or alteration of, or allowing

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

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Requirement	Citation	Type	Comment
CLEAN AIR ACT (CAA){tc VI "CLEAN AIR ACT (CAA)} [42 USC 7401 et. seq.]			
<ul style="list-style-type: none"> - Construction Permits, Including Regulations for the Prevention of Significant Deterioration (PSD) - Construction Permits - Non-attainment Area Requirements - Prevention of Significant Deterioration Requirements 	Part B	C	emissions of air pollutants from any activity Certain activities are exempted from APEN requirements per specific exemptions listed in the regulation
	Part B, Section III		Construction permits are not required for CERCLA activities, however, substantive requirements that would normally be associated with construction permits will apply Also, fuel-fired equipment (generators, compressors, etc) associated with these activities may require permitting
	Section IV D 2	A, C, L	Even though CERCLA activities are exempt from construction permit requirements, non-attainment area requirements may apply if emissions of certain pollutants exceed certain threshold limits The requirements include emissions reductions or offsets, and strict emission control requirements
	Section IV D 3	A, C, L	Even though CERCLA activities are exempt from construction permit requirements, PSD requirements may apply if emissions of certain pollutants exceed certain threshold limits The requirements include strict emission control requirements, source impact modeling, and pre-construction and post-construction monitoring

Requirement	Citation	Type	Comment
CLEAN AIR ACT (CAA){tc \11 "CLEAN AIR ACT (CAA)} [42 USC 7401 et. seq.]			
<ul style="list-style-type: none"> Standards of Performance for New Stationary Sources 	CAQCC Reg No 6 [5 CCR 1001-8]	A	New Source Performance Standards exist for various types of stationary sources. Currently, no standards exist for demolition activities. A standard exists for organic liquid storage vessels greater than 10,000 gallons (40 CFR 60, Subpart Kb). This standard will apply to closure activities utilizing this type of storage vessel.
<ul style="list-style-type: none"> Emissions of Volatile Organic Compounds (VOCs) 	CAQCC Reg No 7 [5 CCR 1001-9]		This requirement applies to the transfer of organic liquids to a tank larger than 56 gallons (bottom fill or submerged fill must be utilized).
<ul style="list-style-type: none"> - General Requirements for Storage and Transfer of VOCs 	Section III B	A	This requirement prohibits the disposal of VOCs by evaporation and spillage.
<ul style="list-style-type: none"> - Disposal of VOCs 	Section V	A	This requirement regulates storage and transfer of petroleum liquids.
<ul style="list-style-type: none"> - Storage and Transfer of Petroleum Liquid 	Section VI	A	
<ul style="list-style-type: none"> Control of Hazardous Air Pollutants 	CAQCC Reg No 8 [5 CCR 1001-10]		This subpart details the general provisions that apply to sources subject to National Emission Standards for Hazardous Air Pollutants (NESHAPs). The provisions will apply to any D&D project that is subject to a NESHAP.
<ul style="list-style-type: none"> - Part A, Subpart A, General Provisions (CAQCC regulation 	40 CFR Part 61,	C	

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

Requirement	Citation	Type	Comment
CLEAN AIR ACT (CAA){tc VI "CLEAN AIR ACT (CAA)} [42 USC 7401 et. seq.]			
incorporates CFR by reference)	Subpart A		This subpart details the regulatory requirements for emissions of beryllium from specific stationary source categories, such as machine shops or incinerators that process/machine beryllium. The requirements may apply to any D&D project that includes size reduction of beryllium containing materials
- Part A, Subpart C, National Emission Standard for Beryllium (CAQCC regulation incorporates CFR by reference)	40 CFR Part 61, Subpart C	C	
- Part B, The Control of Asbestos	Section II	C	This requirement will apply if the project includes asbestos abatement. Compliance requires that asbestos inspectors, asbestos abatement workers, and asbestos abatement project managers are certified in accordance with the regulation
	Section III	C	This section details project requirements including notification, permitting, and asbestos abatement work practices
	Section III B 1 a (i)	C	A written notice of the intent to conduct demolition (regardless of whether asbestos is involved) or asbestos abatement must be submitted to the CDPHE, Air Pollution Control Division at least 10 working days before commencing demolition or an abatement project (form supplied by the CDPHE). This notification should be submitted within the decision document or as a modification to the approved decision document
- Part C, Lead	Section I	C	This requirement applies if the project produces lead emissions (glovebox size reduction, etc.) Compliance requires utilizing a suitable dispersion model to ensure that emissions of lead will not result in an ambient lead concentration that exceeds 1.5 micrograms per cubic meter averaged over a one-month period. This requirement applies if any refrigeration system or

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Requirement	Citation	Type	Comment
CLEAN AIR ACT (CAA){tc \1 "CLEAN AIR ACT (CAA)} [42 USC 7401 et. seq]			
<ul style="list-style-type: none"> Control of Emissions of Ozone-Depleting Compounds 	CAQCC Reg No 15 [5 CCR 1001-19]	C	appliance that contains a regulated ozone-depleting compound (ODC) is disassembled or discarded Compliance requirements include having registered and certified technicians recover all regulated ODCs in an approved vessel, by an approved method, prior to disassembly or disposal
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS{tc \2 "NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS} <ul style="list-style-type: none"> National Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities Standard 	40 CFR 61, Subpart H 61 92	C, L	This section establishes a radionuclide emission standard equal to those emissions that yield an effective dose equivalent (EDE) of 10 mrem/year to any member of the public. The Site complies by using stack effluent discharge data and empirically estimated fugitive emissions in the dose model CAP88-PC for calculating the EDE to the most impacted member of the public to ensure that it does not exceed 10 mrem/year. Also, the perimeter samplers in the Radioactive Ambient Air Monitoring Program sampler network are utilized to verify compliance with the standard.
<ul style="list-style-type: none"> Emission Monitoring and Test Procedures 	61 93	C, A	This section establishes emission monitoring and testing protocols required to measure radionuclide emissions and calculate EDEs. This section also requires that radionuclide emissions measurements (stack monitoring)

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

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Requirement		Citation	Type	Comment
CLEAN AIR ACT (CAA){tc \1 "CLEAN AIR ACT (CAA)} [42 USC 7401 et. seq]				
-- Compliance and Reporting		61 96	C, L	<p>be made at all release points which have a potential to discharge radionuclides into the air which could cause an EDE to the most impacted member of the public in excess of 1% of the standard (0 1 millirem/year)</p> <p>This section requires the Site to perform radionuclide air emission assessments of all new and modified sources For sources that exceed the 0 1 mrem/year EDE threshold (controlled), the appropriate applications for approval must be submitted to the EPA and the CDPHE Additional substantive requirements may apply if the activity requires approval</p>

Requirement	Citation	Type	Comment
FEDERAL WATER POLLUTION CONTROL ACT (aka Clean Water Act (CWA)) {33 USC 1251 et. seq.} WATER QUALITY CRITERIA - GOLD BOOK {tc \1 2 "QUALITY CRITERIA - GOLD BOOK"}	33 USC 1314 (CWA Section 304)	C	<p>The "Gold Book" presents guidelines with respect to water quality criteria for toxic pollutants. Criteria are published for aquatic and human health. The water quality criteria are not promulgated standards, however, they are established guidelines used for developing NPDES permits and may be considered potentially relevant and appropriate. WQC should not be used as effluent limits, rather discharge limits should be established either through the NPDES or UIC permitting process.</p> <p>Although water criteria are non-promulgated and non-enforceable standards, Section 121(d)(2)(B)(i) of CERCLA as implemented by the NCP (40 CFR 300.430(e)(2)(i)(E)) specifies that WQC established under Sections 303 and 304 of the CWA shall be attained where relevant and appropriate under the circumstances of the release. The designated or potential use of the surface or groundwater, the environmental media affected, the purpose for which the WQC were developed, and the latest information are to be considered in determining the relevance and appropriateness of the WQC to the response action. Therefore, the need to comply with WQC as a relevant and appropriate requirement needs to be determined on a case-by-case basis using the factors listed above.</p>
COLORADO BASIC STANDARDS AND METHODOLOGIES FOR SURFACE WATER {tc \1 2 "BASIC STANDARDS AND METHODOLOGIES FOR SURFACE WATER"}	5 CCR 1002-31	C	Refer to RFCA Attachment 5 for surface water action levels and standards.

Requirement	Citation	Type	Comment
FEDERAL WATER POLLUTION CONTROL ACT (aka Clean Water Act (CWA)) {tc \1 1 "WATER POLLUTION CONTROL ACT (aka Clean Water Act (CWA))"} [33 USC 1251 et seq]			
COLORADO BASIC STANDARDS FOR GROUNDWATER{tc \1 2 "BASIC STANDARDS FOR GROUND WATER"}	5 CCR 1002-41	C	Refer to RFCA Attachment 5 for ground water action levels
TOXIC POLLUTANT EFFLUENT STANDARDS {tc \1 2 "POLLUTANT EFFLUENT STANDARDS"} <ul style="list-style-type: none"> • Toxic Pollutants • Compliance 	40 CFR 129 4 40 CFR 129 5	C	If the permitted point is used, then the NPDES permit discharge standards would be met
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS{tc \1 2 "POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS"} <ul style="list-style-type: none"> • Designation of Hazardous Substances • Determination of Reportable Quantities for Hazardous Substances 	40 CFR 116 40 CFR 117 40 CFR 125 102 40 CFR 125 104	A	These subparts are applicable to storage and use of products that contain toxic and hazardous pollutants above reportable quantity limitations, at a facility covered by an NPDES permit In decision documents, identify and protect all connections to the sanitary collection system

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

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Requirement	Citation	Type	Comment
FEDERAL WATER POLLUTION CONTROL ACT (aka Clean Water Act (CWA)) {tc \1 "WATER POLLUTION CONTROL ACT (aka Clean Water Act (CWA))"} [33 USC 1251 et. seq.]			
<ul style="list-style-type: none"> • Applicability of Best Management Practices • Best Management Practices Programs 			
DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES{tc \2 "OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES"} <ul style="list-style-type: none"> • Discharges Requiring Permits 	33 USC 1344 33 CFR 323.3	A/L	
DOE COMPLIANCE WITH FLOODPLAIN/WETLANDS ENVIRONMENTAL REVIEW REQUIREMENTS{tc \2 "COMPLIANCE WITH FLOODPLAIN/WETLANDS ENVIRONMENTAL REVIEW REQUIREMENTS"} <ul style="list-style-type: none"> • Floodplain/Wetlands Determination • Floodplain/Wetlands Assessment • Applicant Responsibilities 	10 CFR 1022 11 12 13	A/L	
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS {tc \1 "RESOURCE AND WILDLIFE PROTECTION LAWS"}			
ENDANGERED SPECIES ACT (ESA) {tc \2 "SPECIES ACT (ESA)"} [16 USC 1531 et seq.]			
EARLY CONSULTATION	50 CFR 402.11	A/L	Identify and minimize early in the planning stage of an action, any potential conflicts between the action and federally listed species

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Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS{tc \1 "RESOURCE AND WILDLIFE PROTECTION LAWS"}			
BIOLOGICAL ASSESSMENT{tc \3 "ASSESSMENT"}			
<ul style="list-style-type: none"> • Purpose • Preparation Requirements • Request for Information • Director's Response <ul style="list-style-type: none"> - No Listed Species or Critical Habitat Present - Listed Species or Critical Habitat Present • Verification of Current Accuracy of Species List • Contents • Identical/Similar to Previous Action • Permit Requirements • Completion Time 	50 CFR 402.12	A/L	This is the process DOE needs to follow to evaluate the potential effects of the action on listed and proposed species and designated and proposed critical habitat and determine whether any such species or habitat are likely to be adversely affected by the action and is used in determining whether formal consultation or a conference is necessary
<ul style="list-style-type: none"> • Submission of Biological Assessment • Use of Biological Assessment 			

Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS {tc \1 "RESOURCE AND WILDLIFE PROTECTION LAWS"}			
INTERAGENCY COOPERATION	50 CFR 402	A/L	This is an optional process that includes all discussions, correspondence, etc between the USFWS and the DOE. It is designed to assist in determining whether formal consultation or a conference is required. If during this step it is determined by the DOE with the written concurrence of the USFWS that the action is not likely to adversely affect listed species or critical habitat, the consultation process is terminated and no further action is necessary.
• Informal Consultation	13		DOE shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat.
• Formal Consultation	14		
MIGRATORY BIRD TREATY {tc \2 "BIRD TREATY" \3 \16 USC 701-715}			
TAKING, POSSESSION, TRANSPORTATION, SALE, PURCHASE, BARTER, EXPORTATION, AND IMPORTATION OF WILDLIFE AND PLANTS	50 CFR 10	A/L	Principally focuses on the taking and possession of birds protected under this regulation. Enforcement is predicated on location of the project and time of the year. Current list of protected birds is kept with the Ecology group.
{tc \3 "POSSESSION, TRANSPORTATION, SALE, PURCHASE, BARTER, EXPORTATION, AND IMPORTATION OF WILDLIFE AND PLANTS"}			

Requirement	Citation	Type	Comment
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NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS

COLORADO NONGAME, ENDANGERED, OR THREATENED SPECIES CONSERVATION ACT [CRS 33-1-115, 33-2-101 to 33-2-107]

<ul style="list-style-type: none"> Compliance with the Colorado Nongame Wildlife including Endangered Species 	CRS 33-2-104 CRS 33-2-105	A/L	It is unlawful for any person to take, possess, transport, export, process, sell or offer for sale, or ship and for any common contract carrier to knowingly transport or receive for shipment any species or subspecies of wildlife appearing on the list of wildlife indigenous to the State of Colorado determined to be endangered within the state (The list is continually updated by the Ecology group)
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FISH AND WILDLIFE COORDINATION ACT {c \ 2 "AND WILDLIFE COORDINATION ACT"} [16 USC 661 et seq]

<ul style="list-style-type: none"> Purpose Impounding, Diverting, or Controlling of Waters Impoundment or Diversion of Waters Rules and Regulations Effects of Sewage and Industrial Waters Authorization of Appropriations Penalties Definitions 	16 USC 661 16 USC 662 16 USC 663 16 USC 664 16 USC 665 16 USC 666 16 USC 666(a) 16 USC 666(b)	A/L	
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Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS			
NATIONAL HISTORIC PRESERVATION ACT (NHPA){TC \L 2 "NATIONAL HISTORIC PRESERVATION ACT (NHPA)" [16 USC 470 et seq]}			
IDENTIFYING HISTORIC PROPERTIES{TC \L 3 "IDENTIFYING HISTORIC PROPERTIES"} <ul style="list-style-type: none"> Assessing Information Needs Locating Historic Properties Evaluating Historical Significance When No Historic Properties Are Found Historic Property Found 	36 CFR 800 4	L	Obligations are met through the Programmatic Agreement among the DOE, Colorado State Historic Preservation Officer and the Advisory Council on Historic Preservation regarding Historic Properties at RFETS, July 17, 1997
ASSESSING EFFECTS OF THE ACTIVITY ON THE PROPERTY{TC \L 3 "ASSESSING EFFECTS OF THE ACTIVITY ON THE PROPERTY"}	36 CFR 800 5	L	
DOCUMENTATION REQUIREMENTS{TC \L 3 "DOCUMENTATION REQUIREMENTS"}	36 CFR 800 8	L	
CRITERIA OF EFFECT AND ADVERSE EFFECT{TC \L 3 "CRITERIA OF EFFECT AND ADVERSE EFFECT"}	36 CFR 800 9	L	
PROTECTING NATIONAL HISTORIC LANDMARKS	36 CFR 800 10	L	
HISTORIC PROPERTIES DISCOVERED DURING IMPLEMENTATION	36 CFR 800 11	L	
EMERGENCY UNDERTAKINGS	36 CFR 800 12	L	
PRESERVATION OF AMERICAN ANTIQUITIES	43 CFR 3	L	
PROTECTION OF ARCHEOLOGICAL RESOURCES	43 CFR 7	L	

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Requirement	Citation	Type	Comment
NATIONAL RESOURCE AND WILDLIFE PROTECTION LAWS ARCHEOLOGICAL RESOURCES PROTECTION [16 USC 470, CHAPTER 1B]			
PROTECTION OF ARCHEOLOGICAL RESOURCES UNIFORM REGULATIONS <ul style="list-style-type: none"> • Purpose • Authority • Definitions • Prohibited Acts • Permit Requirements and Exceptions • Application for Permits and Information Collection • Notification to Indian Tribes of Possible Harm to, or Destruction of, Sites on Public Lands Having Religious or Cultural Importance • Relationship to Section 106 of the National Historic Preservation Act • Custody of Archeological Resources • Determination of Archeological or Commercial Value and Cost of Restoration and Repair • Assessment of Civil Penalties • Civil Penalty Amounts • Other Penalties and Rewards • Confidentiality of Archeological Resource Information • Report 36 CFR 296 	36 CFR 296 1 2 3 4 5 6 7 12 13 14 15 16 17 18 19	L	

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Requirement	Citation	Type	Comment
NATURAL RESOURCE AND WILDLIFE PROTECTION LAWS			
ARCHEOLOGICAL AND HISTORICAL PRESERVATION ACT (AHPA) [16 USC 469a-1]			
Notification and Request for Preservation of Data	16 USC 469a-1(a)	L	Differs from NHPA in that it encompasses a broader scope of resources than those listed on the National Register and requires only preservation of the data (including analysis and publication)
Survey of Sites, Preservation of Data, Compensation	16 USC 469a-1(b)		
SAFE DRINKING WATER ACT (SDWA) [42 USC 300f et. seq.]			
COLORADO PRIMARY DRINKING WATER REGULATIONS{tc \1 2 "PRIMARY DRINKING WATER REGULATIONS"}	5 CCR 1003-1,	C	Refer to RFCA Attachment 5 for surface water action levels and standards and groundwater action levels
MAXIMUM CONTAMINANT LEVEL GOALS{tc \1 2 "CONTAMINANT LEVEL GOALS"}	40 CFR 141	C	Refer to RFCA Attachment 5 for surface water action levels and standards and groundwater action levels

Requirement	Citation	Type	Comment
SOLID WASTE DISPOSAL ACT (aka: Resource Conservation and Recovery Act) [42 USC § 6901 et. seq.] SUBTITLE C: HAZARDOUS WASTE MANAGEMENT [Colorado Hazardous Waste Act (CRS § 25-15-101 to -217)]			
<p>The State of Colorado is authorized to administer portions of the hazardous waste management program (e.g., RCRA) to regulate the generation, treatment, storage, and disposal of hazardous waste within Colorado. As such, the Colorado regulations that are more stringent than the federal counterparts would be applicable to the management of hazardous waste. These regulations may also be relevant and appropriate in situations where a remediation waste is "sufficiently similar" to a RCRA-listed waste (e.g., waste which was generated and disposed of prior to the effective date of regulation) or when the proposed remedial action is similar to a RCRA-regulated activity and would be appropriate to ensure that the activity is protective of human health and the environment. Although the Colorado hazardous waste management regulations are similar to the federal requirements, both the federal and state regulatory citations are provided for reference purposes and to denote that both federal and state requirements were considered in establishing the identifying the ARAR requirement adopted for the remediation of the RFETS. Only substantive portions of the regulations are required under CERCLA actions for onsite activities. The State has not verified that these are the only substantive standards. The final determination is predicated upon an analysis for a specific action.</p>			
SOLID WASTE DISPOSAL SITES AND FACILITIES <ul style="list-style-type: none"> Definitions 	6 CCR 1007-2 Section 1 2	A	"Recyclable materials" means any type of discarded or waste material that is not regulated under Section 25-8-205(1)(e), C.R.S., and can be reused, remanufactured, reclaimed, or recycled
IDENTIFICATION AND LISTING OF HAZARDOUS WASTES{TC L 2 "IDENTIFICATION AND LISTING OF HAZARDOUS WASTES"}	6 CCR 1007-3, 261 [40 CFR 261]	A	

Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
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GENERATOR STANDARDS				
• Hazardous waste determinations	6 CCR 1007-3 Part 262 (40 CFR Part 262) 11	A/C	Persons who generate solid wastes are required to determine if the wastes are hazardous according to 6 CCR 1007-3 Parts 261, 267, 279 [40 CFR Parts 261, 266, and 279]	
• Hazardous waste accumulation areas	34 (a)(1)(i), (ii), (iv), excluding A & B), (a)(3), (a)(4), (c)(1)	A	Persons who accumulate hazardous waste in containers or tanks must manage the waste in a manner that protects human health and the environment	262 40- 43
GENERAL FACILITY STANDARDS				
• Waste Analysis	6 CCR 1007-3 Part 264, Subpart B [40 CFR Part 264, Subpart B] 13 (a)	A	The owner/operator of a facility that stores, treats, or disposes of waste must verify the waste has been characterized adequately	264 13(b)
• Security	14	A/L	The owner/operator of a facility must prevent unauthorized access	
• General Inspection Requirements	15 (a), (c)	A/L	The owner/operator of a facility must inspect for malfunctions, deteriorations, and releases, and must remedy deficiencies	264 15 (d)

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

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Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
<ul style="list-style-type: none"> Personnel Training Requirements 	16 (a), (b), (c)	A/C	Personnel must be trained	264 16(d), (e) 264 17(c)
<ul style="list-style-type: none"> General Requirements for Ignitable, Reactive or Incompatible Wastes 	17 (a), (b)	A/C	Wastes will be managed to prevent accidental ignition or reaction of ignitable or reactive waste, or the mixing of incompatible waste	264 18
PREPAREDNESS AND PREVENTION	6 CCR 1007-3 Part 264, Subpart C [40 CFR 264, Subpart C]			
<ul style="list-style-type: none"> Design and Operation of a Facility 	31	A/C	Design facilities to minimize the potential for fire, explosion or release of hazardous waste	
<ul style="list-style-type: none"> Required Equipment 	32	A/C	Facilities must be equipped with specified equipment to mitigate incidents, should they occur	
<ul style="list-style-type: none"> Testing and Maintenance of Equipment 	33	A/C	Equipment must be maintained	
	34	A/L	Employees must have access to emergency communications when	

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
<ul style="list-style-type: none"> Access to Communications or Alarm System Required Aisle Space Arrangement with Local Authorities 	<p>35</p> <p>37</p>	<p>A</p> <p>A/L</p>	<p>managing hazardous waste</p> <p>Aisle space must be maintained to allow unobstructed access to emergency personnel and emergency equipment</p> <p>The owner/operator must make arrangements with specified local emergency personnel</p>	
CONTINGENCY PLAN AND EMERGENCY PROCEDURES	6 CCR 1007-3 Part 264, Subpart D [40 CFR Part 264, Subpart D]			
<ul style="list-style-type: none"> Purpose and Implementation 	51 (b)	A/C	RFETS Emergency Response Plan incorporates the substantive requirements of the Contingency Plan in the Site's Part B Hazardous Waste Permit. Emergencies such as fire, explosion, or release of hazardous waste must be mitigated immediately.	
<ul style="list-style-type: none"> Emergency Coordinator 	55	A	A designated employee is responsible for coordinating emergency response actions.	
<ul style="list-style-type: none"> Emergency Procedures 	56 (a-1)	A		
MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING	6 CCR 1007-3 Part 264, Subpart E [40 CFR Part 264, Subpart E]			
		A	Operating Record	264 73
		A	Recordkeeping	264 74

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

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Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
GROUND-WATER MONITORING	6 CCR 1007-3 Part 264, Subpart F [40 CFR Part 264, Subpart F]	A	The substantive portions of the groundwater monitoring ARARs for each CERCLA action will be incorporated into the Integrated Monitoring Plan (IMP)	
CLOSURE AND POST-CLOSURE	6 CCR 1007-3 Part 264, Subpart G [40 CFR Part 264, Subpart G]			
• Closure Performance Standards	111	A	The owner/operator must close the facility in a manner that protects human health and the environment	
• Disposal or Decontamination of Equipment, Structures, or Soils	114	A/C	All hazardous wastes and residues of hazardous waste must be disposed or decontaminated	
• Post-Closure Care and Use of Property	117	A/C	Human health and the environment must be protected after closure is complete if hazardous waste remains at the facility	
USE AND MANAGEMENT OF CONTAINERS	6 CCR 1007-3 Part 264, Subpart I [40 CFR Part 264, Subpart I]			
• Condition of Containers	171	A	Containers must be maintained in good condition	
• Compatibility of Waste in Containers	172	A	Wastes must be compatible with containers	

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

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Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
<ul style="list-style-type: none"> Management of Containers 	173	A	Containers must be closed except when adding or removing waste	
<ul style="list-style-type: none"> Inspections 	174	A	Containers must be inspected weekly	
<ul style="list-style-type: none"> Containment <ul style="list-style-type: none"> System Design and Operation Ignitable and Reactive Wastes Incompatible Wastes 	175 176 177	A A A		
<ul style="list-style-type: none"> Closure 	178	A	Hazardous wastes and residues of hazardous waste must be removed or decontaminated from the unit and soils	
<ul style="list-style-type: none"> Air Emission Standards 	179	A/C	Hazardous wastes must be managed in accordance with AA, BB, CC, as appropriate	
TANK SYSTEMS	6 CCR 1007-3 Part 264, Subpart J [40 CFR Part 264, Subpart J]			
<ul style="list-style-type: none"> Design and Installation of New Tank Systems or Components 	192 (a-f)	A	Tank systems must be designed to maintain their integrity when storing or treating hazardous waste	
<ul style="list-style-type: none"> Containment and Detection of Releases 	193 (a)(1,2,3,5)	A	Secondary containment must be designed to contain and detect	

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

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Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
<ul style="list-style-type: none"> General Operating Requirements Inspections Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems Closure and Post-Closure Care Special Requirements for Ignitable and Reactive Wastes Special Requirements for Incompatible Waste Air Emission Standards 	<p>194 (a-c)</p> <p>195 (b,c)</p> <p>196 (a-c),(e)</p> <p>197 (a,b)</p> <p>198</p> <p>199</p> <p>200</p>	<p>A</p> <p>A</p> <p>A</p> <p>A</p> <p>A/C</p> <p>A/C</p> <p>A/C</p>	<p>any releases from the tank system</p> <p>Tank systems must be maintained in good condition to prevent releases to the environment</p> <p>Inspections are conducted to identify any tank system integrity concern</p> <p>During closure, hazardous waste and hazardous waste residues must be removed from the tank system</p> <p>Ignitable or reactive waste must be managed as specified in this section</p> <p>Incompatible waste must not be introduced into a tank system unless 264 17(b) is complied with</p> <p>All hazardous waste shall be managed in accordance with AA, BB, CC</p>	

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Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS	6 CCR 1007-3 Part 264, Subpart S [40 CFR Part 264, Subpart S]			
	553 (a-c)	A	Temporary units allow flexibility. Justification for alternative compliance must be included in the CERCLA/RFCA decision document.	
	554 (d)(1)(i) and (ii) 554(d)(2)(i)-(vi)	A	The volume of Tier I soil should be wrapped in material that will isolate it from surrounding environmental media or in some other manner that meets the requirements of 264.554(d)(1).	
MISCELLANEOUS UNITS	6 CCR 1007-3 Part 264, Subpart X [40 CFR Part 264, Subpart X]			
	601	A	Miscellaneous units must be designed, constructed, operated and maintained in a manner that protects groundwater, surface water, wetlands, soils, and air.	
	602	A	Miscellaneous units must be managed to ensure compliance with 264.15 (inspections), 264.33 (testing and monitoring), 264.101 (corrective action for releases).	
	603	A	Miscellaneous units that are disposal units must meet Post Closure Care requirements.	
Environmental Performance Standards				
• Monitoring, Analysis, Inspection, Response, Reporting, and Corrective Action				
• Post Closure Care				

Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
<p>AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS</p> <ul style="list-style-type: none"> Standards General Waste Determination Procedures Standards Tanks Standards Surface Impoundments Standards Containers Standards Closed-Vent Systems and Control Devices Inspection and Monitoring Requirements 	<p>6 CCR 1007-3 Part 264, Subpart CC [40 CFR Part 264, Subpart CC]</p> <p>1082 1083 1084 1085 1086 1087 1088</p>	<p>A A A A A A A</p>	<p>Air emission standards must be incorporated into the design of tanks, surface impoundments, and container facilities that store or treat hazardous waste with organic concentrations equal to or greater than 10 ppm (by weight)</p>	1089
<p>CONTAINMENT BUILDINGS</p> <ul style="list-style-type: none"> Design and Operating Standards Closure and Post-Closure Care 	<p>6 CCR 1007-3 Part 264, Subpart DD [40 CFR Part 264, Subpart DD]</p> <p>1101(a), (b), (c)(1, 3 (excluding 1-iii), and 4), (d), (e) 1102</p>	<p>A A</p>	<p>Containment buildings must be designed and operated to prevent releases to the environment</p>	

Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
LAND DISPOSAL RESTRICTIONS	6 CCR 1007-3 Part 268 [40 CFR Part 268]			
• Dilution Prohibited as a Substitute for Treatment	3	A	LDR determinations must be completed for hazardous wastes generated	
• LDR Determination (Determination if Hazardous Waste Meets the LDR Treatment Standards)	7	A	Land disposal restrictions apply primarily to the off-site disposal actions proposed as part of the remedial activity	
• Special Rules for Wastes that Exhibit a Characteristic	9 (a-c)	A		
MANAGEMENT OF UNIVERSAL WASTE	6 CCR 1007-3 Part 273 [40 CFR Part 273]			Subpart B Subpart C
• Prohibitions	11, 31	A	A handler of universal waste is prohibited from disposing, diluting, or treating universal waste, except during responses to releases	
• Waste Management	13, 33	A		
• Labeling and Marking	14, 34	A	Universal waste and the associated accumulation areas must be labeled and marked as defined in this section	
• Employee Training	16, 36	A	Employees must be trained about waste management requirements and on emergency procedures according to their responsibilities	
	17, 37			

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
<ul style="list-style-type: none"> Response to Releases 		A	Universal waste handlers must contain releases of universal wastes, and must manage the resulting waste, as appropriate, in accordance with the hazardous waste regulations	
STANDARDS FOR THE MANAGEMENT OF USED OIL	6 CCR 1007-3 Part 279 [40 CFR Part 279]			
<ul style="list-style-type: none"> Used Oil Specifications 	11	A	Used oil burned for energy recovery must meet the specifications of this section	
<ul style="list-style-type: none"> Prohibitions 	12	A	Used oil must not be stored in surface impoundments, be used as a dust suppressant, or be burned in unapproved units	
<ul style="list-style-type: none"> Hazardous Waste Mixing 	21	A	Used oil must be characterized and managed in accordance with 269 10 and this section	
<ul style="list-style-type: none"> Used Oil Storage 	22	A	Used oil must be managed in containers or tanks in a manner that protects human health and the environment Releases must be cleaned up and steps must be taken to prevent re-occurrence	
<ul style="list-style-type: none"> On-Site Burning in Space Heaters 	23	A	Used oil may be used as fuel for space heaters if the gases are vented to ambient air, and the maximum capacity of the space heater is not more than 0.5 million Btu per hour	
SOIL REMEDIATION POLICY DOCUMENT				
<ul style="list-style-type: none"> Colorado Soil Remediation Objectives Policy Document 	Published by CDPHE in December, 1997	TBC	Cost effective, site-specific risk-based approach to establishing soil remediation objectives Would be considered in manner compatible with ALF and RFCA Attachment 10	

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
UNDERGROUND STORAGE TANKS				
• Performance Standards for New USTs	7 CCR 1101-14 [40 CFR Part 280]			
• General Operating Requirements	3 20, [20]	A	USTs must be designed, maintained, and operated to prevent releases from the tank systems to the environment	
• Release Detection	4 30-4 33, [30- 33]	A		
• Clean-Up of Spills and Overfills	5 40-5 44, [40- 44]	A	Releases that impact soils or groundwater will be identified as a PAC, will be added to the ER Ranking List, and will be incorporated into the integrated Site remediation program	
• Initial Response to Spills and Overfills	6 53, [53]	A	Coordination efforts within CDPHE and the Department of Labor & Employment, Oil Inspection Section will be accomplished through communication with the LRA	
• Initial Abatement Measures	7 61(b),(c), [61(b),(c)]	A		
• Initial Site Characterization	7 62(a), [62(a)]	A		
• Free Product Removal	7 63(a), [63(a)]	A		
• Investigations for Soil and Groundwater Clean-Up	7 64(a),(b),(c), [64(a),(b),(c)]	A		
• Temporary Closure	7 65(a), [65(a)]	A		
	8 70(a),(b), [70(a),(b)]	A		

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
<ul style="list-style-type: none"> Permanent Closure and Changes-in-Service Assessing the Site at Closure or Change-in-Service Applicability to Previously Closed UST Systems 	<p>8 71(b),(c), [71(b),(c)]</p> <p>8 72, [72]</p> <p>8 73, [73]</p>	<p>A</p> <p>A</p> <p>A</p>		8 74

Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
PERFORMANCE STANDARDS FOR TANKS				
• Design and Construction of Tanks	AST 31 2	A	ASTs must be designed, maintained, and operated to prevent releases to the environment	
• Location and Installation of Outside Aboveground Tanks	AST 31 3	A		
• Location and Installation of Aboveground Storage Tanks in Vaults	AST 31 4	A		
• Normal Venting for Aboveground Tanks	AST 31 5	A		
• Emergency Relief Venting for Fire Exposure for Aboveground Tanks	AST 31 6	A		
• Vent Piping for Aboveground Tanks	AST 31 7	A		
• Tank Openings other than Vents for Aboveground Tanks	AST 31 8	A		
• Installation of Tanks Inside of Buildings	AST 31 9	A		
• Standards for Piping, Valves, and Fittings	AST 32	A		

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Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
OPERATING REQUIREMENTS				
• Collision Protection	7 CCR 1101-14 Part 4 AST 40	A		
• Spill and Overfill Control (excluding reporting requirements), Remote Impounding, Secondary Containment	AST 41 (excluding reporting part of AST 41 1(e))	A		
• Operation and Maintenance of Corrosion Protection	AST 42	A		
• Compatibility Requirements for all Tanks	AST 43	A		
• Static Protection for all Tanks	AST 44	A		
• Repairs Allowed (excluding requirement for approvals and inspections by State Oil Inspector)	AST 45 (excluding AST 45(b)(4))	A		
• Out-of-Service, Closure or Change-in-Service	AST 46(c)(1-5)	A		AST 46(a), (b), (c, 8-10), (b) Records and documentation

Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
RELEASE DETECTION	7 CCR 1101-14 Part 5 AST 5	A		AST 52 Records of Inspections
RELEASE RESPONSE AND CORRECTIVE ACTION	7 CCR 1101-14 Part 7			
• Initial Response	AST 72(b), (c)	A	Releases that impact soils or groundwater will be identified as a PAC, will be added to the ER Ranking List, and will be incorporated into the integrated Site remediation program.	
• Initial Abatement Measures	AST 73	A	Coordination efforts within CDPHE and the Department of Labor & Employment, Oil Inspection Section will be accomplished through communication with the LRA	
• Repair or Closure Required	AST 74	A		
OIL POLLUTION PREVENTION	7 CCR 1101-14 Part 11			
• Oil Pollution Prevention Oil Pollution Prevention SPCC Plan Requirements	AST 112 7(c), (d), (e), 1-2, 4-5)	A	A SPCC plan would not be specifically required as an ARAR, however, the substantive requirements that are incorporated into and implemented as part of the SPCC plan would be required as an ARAR (e.g., Prediction of the direction, rate and flow of a release from a tank system need not be included in a plan, however, it must be known by the facility and be available to emergency responders at the facility)	

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Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
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TOXIC SUBSTANCES CONTROL ACT (TSCA) [15 USC 2601 et seq] Relating to PCBs				
PCB USE AUTHORIZATIONS	40 CFR 761 30	A	Lists authorized uses and use restrictions for PCBs	
MARKING REQUIREMENTS	40 CFR 761 40 and 45	A	Labeling of PCBs and PCB storage Areas	
DISPOSAL REQUIREMENTS		A		
<ul style="list-style-type: none"> • Applicability • Disposal Requirements • PCB Remediation Waste • PCB Bulk Product Waste • Disposal of R&D and Chemical Analyses wastes 	761 50 761 60 761 61 761 62 761 64		General PCB Disposal Requirements Disposal Requirements	
STORAGE REQUIREMENTS FOR PCBs	40 CFR 761 65	A		
<ul style="list-style-type: none"> • Facility Criteria • Temporary Storage • Inspections • Container Specifications • PCB radioactive waste • Marking • Laboratory Sample Exemption from Manifesting 				
INCINERATION	40 CFR 761 70	A		
<ul style="list-style-type: none"> • Liquid PCBs • Non-Liquid PCBs 			These regulations would only be ARARs for the construction and operation of an onsite PCB incinerator, it is envisioned that this will not occur	
HIGH EFFICIENCY BOILERS	40 CFR 761 71	A		
<ul style="list-style-type: none"> • Operating requirements 			These regulations would only be ARARs for onsite burning PCB mineral oil dielectric fluid in a boiler, it is envisioned that this will not occur	

A - Action-Specific ARAR, C - Chemical-Specific ARAR, L - Location-Specific ARAR, TBC - To Be Considered

Colorado Revised Statutes (CRS) Title 8 Article 20 Parts 7 and 2; Title 18 Article 25 Part 1

Requirement	Citation	Type	Comment	BMP
measurement-based use, reuse, and on-site or off-site disposal under 761361(a)(6) and determination under 761 79(b)(3)				
Self-implementing alternative dextraction and chemical analysis procedures for non-liquid PCB remediation waste samples	40 CFR Subpart Q	A	Applicable procedures when using alternatives to required analytical methodology	
Sampling non-liquid, non-metal PCB bulk product waste for purposes of characterization for PCB disposal in accordance with 761 62, and sampling PCB remediation waste destined for off-site disposal, in accordance with 761 61	40 CFR Subpart R	A	Characterization requirements for PCB bulk product waste and PCB remediation waste when characterization for disposal is required	
Double wash/rinse method for decontaminating non-porous surfaces	40 CFR Subpart S	A	Referenced procedure from 761 79	

KAISER-HILL ENVIRONMENTAL SYSTEMS AND STEWARDSHIP ENVIRONMENTAL CHECKLIST ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

The purpose of the environmental checklist (EC) is to provide information for review of work activities (e.g., IWCP work packages) by the Project environmental staff and Environmental Systems and Stewardship (ESS) personnel. These reviews ensure that environmental compliance is part of the IWCP planning and work process. An EC should be submitted to ESS for any activity in which compliance with environmental laws or regulations or environmental protection could be affected. Completed ECs are typically processed in less than five work days. Review the instructions for details on each topic.

- **PROJECT OR ACTIVITY NAME:**
- **PROPOSED START DATE:** January ____, 2001
- Please specify and explain any schedule urgency or deadlines:
- **RESPONSIBLE MANAGER (NAME, BLDG., EXT.):**
- **POINT OF CONTACT (NAME, BLDG , EXT):**
- **DETAILED WORK DESCRIPTION:**

Conditions of Approval:

Approval: _____
K North, Environmental Systems and Stewardship

Date: _____

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ENVIRONMENTAL CHECKLIST

YES NO

1 COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA):

- Is the work required or covered by the Rocky Flats Cleanup Agreement (RFCA)? ☐ YES ☐ NO
- Will the work include decontamination and decommissioning activities? ☐ YES ☐ NO
- Will the work include environmental restoration? ☐ YES ☐ NO

2 SOILS OR ASPHALT DISTURBANCE

- Will soils or asphalt be disturbed? ☐ YES ☐ NO
- Is the soil or asphalt expected to be contaminated? ☐ YES ☐ NO

If YES, estimated volume of material to be disturbed and type of contaminants

- Will the disturbance occur in or near an IHSS? (Please list IHSS numbers in 'Additional Comments' section) ☐ YES ☐ NO
- Are soils or asphalt to be characterized as part of the project (see instructions)? ☐ YES ☐ NO
- Will the soils or asphalt be recycled? ☐ YES ☐ NO
- Will soils or asphalt be managed as waste? ☐ YES ☐ NO

If YES, where would the waste be stored on-site and what off-site facility would be used?

- Will excavated soils or asphalt be put back into the excavation? ☐ YES ☐ NO
- Will excavated soils and asphalt be stockpiled? ☐ YES ☐ NO

If YES, where and for how long (estimation)?

3 WASTE MANAGEMENT.

What types of waste will be generated? (Estimated Quantity)

- | | | |
|---------------------------------------|--|---|
| <input type="checkbox"/> TRU () | <input type="checkbox"/> LLMW () | <input type="checkbox"/> Hazardous () |
| <input type="checkbox"/> TRM () | <input type="checkbox"/> Sanitary () | <input type="checkbox"/> PCBs () |
| <input type="checkbox"/> LLW () | <input type="checkbox"/> Liquid () | <input type="checkbox"/> Asbestos () |

- Has a waste management plan been prepared? ☐ YES ☐ NO
- Potential on-site or off-site facility to manage waste
- Estimated quantity shipped off-site, by waste type

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ENVIRONMENTAL CHECKLIST

	YES	NO
4 CLEAN AIR ACT (CAA):		
<ul style="list-style-type: none"> Will work involve processing of materials or disturbing surface areas that would increase air pollutants (e g , dust, radionuclides, VOCs?) If YES, provide contaminant levels, process rates and emission rates 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Will the work involve use of fuel-fired (e g , generators, compressors and pumps) equipment? If YES, is it rental equipment or existing Site equipment? 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Will work include installation, removal, or maintenance of equipment containing ozone depleting compounds? 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Will the work occur in an enclosed permanent structure? 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Will the work involve radionuclides or occur in an area with potential radionuclide contamination? If YES, provide details (see instructions) 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Will the work involve asbestos removal? If YES, provide an estimated volume 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Have baseline-monitoring requirements been discussed with ESS? 	<input type="checkbox"/>	<input type="checkbox"/>
5 CLEAN WATER ACT (CWA):		
<ul style="list-style-type: none"> Does the work impact <ul style="list-style-type: none"> Surface water or areas with potential runoff to surface water drainages? Ground water or subsurface penetrations or disturbances? Water treatment? Sewage treatment plant? Special water sources (e g , Great Western Reservoir)? 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Could this work release pollutants (e g , liquids, sediment) to surface water? If YES, please explain, including identification of pollutants, where release could go, or discuss in Work Description 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Could this work release pollutants to the sanitary waste system via drains? 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Does this work involve D&D of a building or an ER activity? If YES, have baseline-monitoring requirements been discussed with ESS? 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Will incidental water need to be treated on-Site? 	<input type="checkbox"/>	<input type="checkbox"/>
6. TANKS:		
<ul style="list-style-type: none"> Will tanks, process lines, waste lines, sumps, or drains be affected by the work? If YES, please explain below, including where an accidental release could go, or discuss in Work Description 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Will tanks be drained, removed, or otherwise affected? 	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Are the tanks above ground storage tanks? 	<input type="checkbox"/>	<input type="checkbox"/>

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ENVIRONMENTAL CHECKLIST

	YES	NO
• Are the tanks underground storage tanks?	<input type="checkbox"/>	<input type="checkbox"/>
• Will RCRA-regulated tanks be drained, removed, or otherwise affected as a result of the action?	<input type="checkbox"/>	<input type="checkbox"/>
7 POLLUTION PREVENTION (Visit the P2 website for additional information)		
• Has pollution prevention (e g , waste minimization, energy efficiency, recycling or reuse, water conservation, and "green" procurement) been integrated into work planning and execution?	<input type="checkbox"/>	<input type="checkbox"/>
If YES, describe below or in Work Description Include estimates of quantifiable waste reductions and cost savings		
8 ECOLOGY (Note that Site ecologists will provide final determinations):		
• Will the work potentially affect		
Threatened or endangered species habitat (e g , Preble's Mouse)?	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands (e g , dredge or fill operations)?	<input type="checkbox"/>	<input type="checkbox"/>
Designated natural areas?	<input type="checkbox"/>	<input type="checkbox"/>
Birds or bird nests?	<input type="checkbox"/>	<input type="checkbox"/>
• Will disturbed areas require revegetation?	<input type="checkbox"/>	<input type="checkbox"/>
9. OTHER ISSUES:		
• Have the ARARs been identified and documented?	<input type="checkbox"/>	<input type="checkbox"/>
• Is this work part of a RCRA Corrective Action?	<input type="checkbox"/>	<input type="checkbox"/>
• Is the work described in a closure description document or other decision document?	<input type="checkbox"/>	<input type="checkbox"/>
• Will any new or project-specific chemicals be used (not currently used on-Site)?	<input type="checkbox"/>	<input type="checkbox"/>
• Could the work affect drinking water sources or supplies?	<input type="checkbox"/>	<input type="checkbox"/>
• If the work is a clean-up action, will cost and duration stay within \$5 million and 60 months?	<input type="checkbox"/>	<input type="checkbox"/>
• Will the work potentially result in long-term changes to the environment?	<input type="checkbox"/>	<input type="checkbox"/>
• Is the work likely to be publicly controversial?	<input type="checkbox"/>	<input type="checkbox"/>
• Will the action establish a precedent for future projects that will have significant effects, or represent a "decision in principle" about a future consideration?	<input type="checkbox"/>	<input type="checkbox"/>
• Is the action related to other projects or to a larger program?	<input type="checkbox"/>	<input type="checkbox"/>
If YES, please explain below or discuss in Work Description		

ADDITIONAL COMMENTS

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